

Two Component Coating Compositions and Coatings Produced Therefrom

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Abstract of the disclosure

The present invention is directed to two component coating compositions that cure under ambient conditions and more particularly to those having low VOC (volatile organic content) that are suitable for use in automotive refinish and Original Equipment Manufacturing (OEM) applications. The coating composition includes crosslinkable and crosslinking components, wherein the crosslinkable component includes a low polydispersity, low molecular weight copolymer having on an average 2 to 25 crosslinkable functional groups, such as hydroxyl, acetoacetoxy, carboxyl, epoxy, primary amine and secondary amine. The copolymer is polymerized from a monomer mixture that includes one or more non-functional methacrylate monomers and one or more functional acrylate monomers provided with the functional groups. The crosslinking component includes polyisocyanate, polyamine, epoxy, polyacid, ketimine, melamine, or a combination thereof. The invention is also directed to coating produced from the coating composition.